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ABSTRACT

The author presents an overview of the rescheduled school year concept as it relates to the economic and educational objectives of a school district. He points out various approaches that could be adopted in designing a rescheduled school year program and presents a guide sheet designed to assist in predicting the effectiveness of an extended school year plan. The major portion of the document is given over to a description of a case study made to determine the impact of a rescheduled school year on a school district. The case study covers enrollment projections; school capacity; and estimated needs for classrooms, construction, buses, operation, and teachers. A comparison of costs under the rescheduled year with costs under the present conventional schedule concludes the study. (Pages 29 and 33-37 may reproduce poorly.) (DN)

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REALIZING THE ECONOMY OBJECTIVE THROUGH A RESCHEDULED SCHOOL YEAR

George I. Thomas

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REALIZING THE ECONOMY OBJECTIVE THROUGH
A RESCHEDULED SCHOOL YEAR

A few years ago it was virtually impossible to introduce the extended school year concept to a large audience without creating a wave of emotionalism which threatened to engulf the speaker. Today, the story is quite different. Many people, educators and non-educators, are taking a new look at the lengthened school year as a solution to some of our more pressing problems. Study groups have been formed across the land. Magazines and newspapers are filled with stories about year round schooling and the woods is literally filled with authorities on the subject. Unfortunately, there are a large number of pseudo experts working with the study groups who create a great deal of damage and frequently destroy a move to update education before the public is aware of what has happened.

One sees this in numerous school systems where the public is asked to react to one of several extended school year plans which is not understood or which will not meet the objectives of the community.

The Basic Objectives

Proponents of an extended school year often appear to have different basic objectives. However, this need not be true. For example, the initial mandate of the New York State Legislature called for a feasibility study to realize economy objectives. The economy objective has been looked at with disfavor by some professional educators who have not considered the fact that implementation of recommended extended school year plans will require considerable innovation in the area of teaching procedures and the development of a curriculum which is highly individualized. Thus, implementation of the accelerating trimester or quadrimester plans will be facilitated by the introduction of a new unit approach or a curriculum modification similar to what is being done in the Greater Atlanta Secondary schools.

While economy is the most frequently cited objective, school board members are warned that it takes more than economy to sell an extended school year plan to the general public. Consideration should be given to the development of an extended school year plan which incorporates direct as well as indirect educational advantages.

The Economy Objective--The Release of Classroom Space

Many school districts are facing a crisis due to a shortage of classroom space. While a shortage of dollars or an unwillingness to divert tax dollars to new school construction may be the reason for overcrowded classrooms, the adoption of double sessions, or the use of emergency facilities, the basic reason for considering the feasibility of a rescheduled school year may stem from a desire to increase the dollar return on current investments in existing school plants.

The Economy Objective--The Release of Tax Dollars

The elimination of the need for a new school, the possibility of reducing the size of a bond issue or the closing of an old existing school may be related to the previous objective, but they ultimately show where tax dollars can be released in areas of the budget such as capital outlay, debt service and operating expense. Other dollar savings may be realized in transportation, equipment and teacher salaries, but here the savings depend upon the design or plan adopted.

The Educational Objective--Improved Climate for Learning

Many educators see a need for educational changes. Some of them, consciously or unconsciously, support the concept of a rescheduled school year in order to obtain public support for a new curriculum. Some educators have requested large sums of money to implement a new pattern of school organization, not because

of a desire to realize an economy goal, but merely because this is the best solution to the problem of financing a massive retooling of the schools to meet the challenge of educating children for life in the 21st century.

Other educators realize that a good extended school year plan is going to be something permanent, therefore, the task of providing inservice training to teachers and students plus the reorganization of the school and the curriculum are basic to the success of the program. Here considerable planning money or implementation funds are desired to help the educators move through a transition period which will while improving the climate for learning will ultimately release space or dollars to repay the taxpayers for the initial investment in the new ESY pattern of schooling.

The Educational Objective--
Increased Learning Time

Proponents of year round schooling often advocate keeping the schools open for 11 or 12 months, but they have no desire to provide additional learning time. This may be considered shortsightedness because a school program which is limited to 180 days of schooling cannot begin to meet the educational needs of children who are faced with life in a world far more complex than was faced by their peers at the start of the 20th century when the 180 day calendar began to be accepted as a minimum. Modern children need to be able to delve deeper, they need exposure to many new fields of learning, they need a broadened and enriched background of knowledge plus skills which require time for mastery and reinforcement. Still other students need to work in a program which provides vocational training as well as academic.

The school calendar can be extended, but it should provide something more than increased utilization of a school building or a teacher. Failure to recognize the need for an extended learning year can lead to student frustration, failure, and a lack of readiness to live as a contributing member of society.

The Educational Objective--The Development of a Continuous Learning Year

Many children are just beginning to master a basic skill or develop understanding of an important concept when the school begins to tool down for the summer. At that point little new learning goes on and then when school closes the children begin to regress. By the end of summer school resumes, but the children have regressed or forgotten much that they had learned. With the retooling process comes reteaching and relearning all of which interferes with the introduction of new skills and new learning experiences.

The children need many vacations, but they cannot afford extended school vacations of two or three months duration during the summer or any other season of the year. A continuous learning year should be considered as most desirable for all children, but especially the disadvantaged. While much of the learning may go on in a classroom, the school and other agencies can combine efforts to insure that all children really have an opportunity to work in a setting that provides a continuity to learning that does not exist in most schools which continue to operate under an agrarian oriented school calendar.

Someone Has To Pay The Bill

Regardless of the objective someone has to pay the bill. Frequently, a desirable educational program is terminated due to lack of funds. In other school districts the teachers and school administrators see the need for change, but they are unable to move in the direction of a more innovative program. They are still fighting for survival. One solution to their problem can be the rescheduled school year. Money and time can be released to update our schools if the educators are sincere in their desire to improve the educational system. It will not be easy, but it can be done.

Dollar savings can be realized in many school systems without reorganizing the schools, but all too often they have a negative impact upon the educational program. This need not happen with recommended lengthened school year programs. Frequently, school administrators will resist the concept of a rescheduled school year because the word economy is attached to it. It is very difficult for them to accept the statement that a more effective program of education can be instituted without expending as much or any more than would be spent for a regular school year program.

This presentation is an attempt to demonstrate areas where dollar savings can be realized to help pay the bill, both the immediate as well as the long range ones, that society receives long after the poorly educated have forgotten the names of their teachers.

Changing Enrollment Flow Patterns

In order to realize a savings in classroom space or dollars the extended school year plan must ultimately lead to a change in enrollment flow patterns. If the ESY design fails to do this, another plan should be considered unless the economy goal is second or third in importance instead of first. Perhaps the simplest explanation of the term changing enrollment flow patterns can be illustrated by the following.

1. The Term Rotation or Cycling ESY Plans

   A lengthened school year calendar is adopted with the understanding that a large fraction of the students in a school system will be in recess at all times. Through the rotation of terms or cycles it is possible to increase the capacity of a school by 25, 33, or 50 percent.

2. Extended School Year Plans Based Upon Student Acceleration

   Several patterns of school organization have been developed which use the extra learning time in a lengthened school year to reduce the total number of years of schooling. It should be understood at the beginning that it takes one to five years of operation to change enrollment flow patterns

so if a school district wants space immediately, it should be very careful in the design selection. For example, the acceleration trimester design changes the nature of the enrollment flow pattern at the end of the fourth trimester. In contrast the Continuous School Year acceleration plan will take five years to release classroom space or dollars. In the meantime school costs will rise 8 or 10 percent per year. This is where people get discouraged. They want economy instantaneously and will not readily pay out extra cash to obtain a deferred dollar saving.

3. The Time Equalization Factor of the Multiple Trails Plan Changes the Day by Day Enrollment Patterns

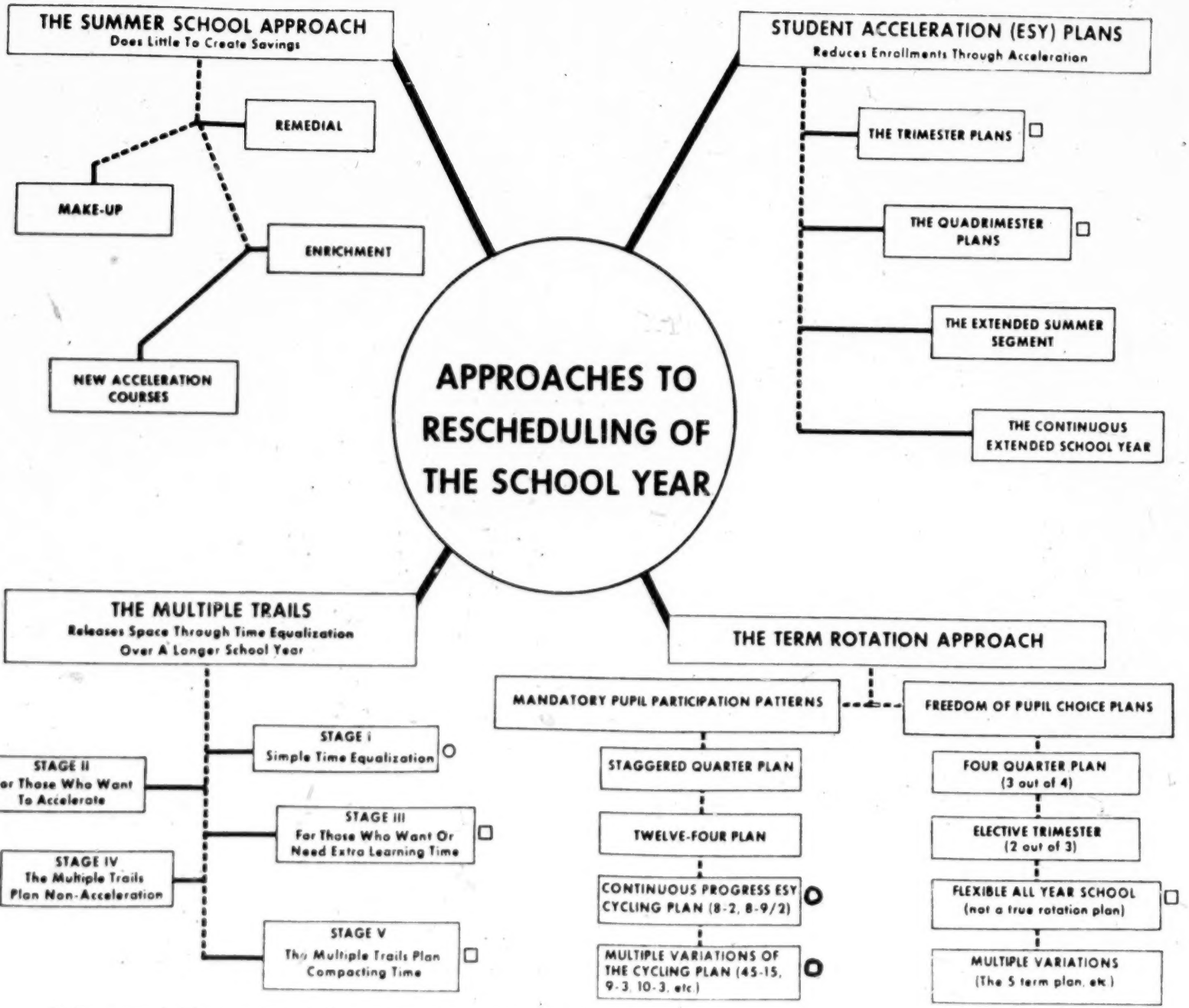
The learning time allocated for mastery of a course is spread over a lengthened educational time line. The students are not out of school for an extended period of time. However, with time equalization they no longer have to spend as many minutes per week on a subject. Classroom space and teacher time can be acquired through the rescheduled student day without an extra outlay of funds during the first year.

It's Like Going to a Smorgasbord

Numerous critics rejoiced over a recent article in Nations School. "Look," they cried, "another school district has rejected year round schooling so what are you trying to sell us. Nobody is going to buy your lengthened school year plans."

What they fail to realize is that the public was correct in rejecting the choice of offerings presented. In this case, as in so many others, the public had been exposed to a sampling of a smorgasbord array of extended school year plans.

Few individuals are prepared to select one lengthened school year plan from a choice of 5, 10, 15, 20 or more patterns of school organization. Giving the public the option of selecting one or more plans from the smorgasbord collection can only lead to disaster. The important issue should be the objective to be realized. Repeatedly, educators will say the primary objective will not be economy. This is fine if the public is prepared to pay the cost of a new program which cannot become self-sustaining due to the nature of the plan under consideration. Actually, there should be no conflict between those pressing for a more


APPROACHES TO RESCHEDULING OF THE SCHOOL YEAR
THE SUMMER SCHOOL APPROACH
Does Little To Create Savings
REMEDIAL
MAKE-UP
ENRICHMENT
NEW ACCELERATION COURSES
STUDENT ACCELERATION (ESY) PLANS
Reduces Enrollments Through Acceleration
THE TRIMESTER PLANS
THE QUADRIMESTER PLANS
THE EXTENDED SUMMER SEGMENT
THE CONTINUOUS EXTENDED SCHOOL YEAR
THE MULTIPLE TRAILS
Releases Space Through Time Equalization Over A Longer School Year
STAGE I
Simple Time Equalization
STAGE II
For Those Who Want To Accelerate
STAGE III
For Those Who Want Or Need Extra Learning Time
STAGE IV
The Multiple Trails Plan Non-Acceleration
STAGE V
The Multiple Trails Plan Compacting Time
THE TERM ROTATION APPROACH
MANDATORY PUPIL PARTICIPATION PATTERNS
FREEDOM OF PUPIL CHOICE PLANS
STAGGERED QUARTER PLAN
TWELVE-FOUR PLAN
CONTINUOUS PROGRESS ESY CYCLING PLAN (8-2, 8-9/2)
MULTIPLE VARIATIONS OF THE CYCLING PLAN (45-15, 9-3, 10-3, etc.)
FOUR QUARTER PLAN (3 out of 4)
ELECTIVE TRIMESTER (2 out of 3)
FLEXIBLE ALL YEAR SCHOOL (not a true rotation plan)
MULTIPLE VARIATIONS (The 5 term plan, etc.)

○ Recommended for immediate dollar savings plus educational values.
□ Recommended for educational purposes with potential dollar savings in the near future.

effective pattern of education and those who favor an extended school year plan which stresses economy. The most desirable extended school year plans will serve as a catalyst to educational change and should set the way for a more effective program.

The Development of a Guide Sheet to Predict The Effectiveness of a Lengthened School Year Plan

At the present time many school systems have committees studying the feasibility of an extended school year plan. It is recommended that they agree on their primary objective before selecting a pattern of school organization to test or to recommend to the public.

If a committee or an individual is reviewing the literature on the extended school year, making visits to schools which have operated what may be considered an extended school year plan, or is merely trying to select one of several ESY plans to resolve a local problem, it is suggested that a guide sheet be prepared similar to one entitled "An Evaluation Guide for Predicting the Effectiveness of a Lengthened School Year Program." This exploratory questionnaire will clarify many points that are not always understood.

For example, people will ask why didn't you continue with the Com... Extended School Year Program. The answers can be found in the questionnaire. It was designated as an experimental program. As such it had definite values. We wanted to measure the impact on children. Economy, while important, was not the primary goal. Here, it was secondary. Again, the program was voluntary. This showed that the Commack Program would have difficulty in realizing the economy objective. Again, the acceleration concept was being tested. It soon became evident that this approach would pose problems since large sums of money would be necessary to support an all school nonexperimental program through a six year transitional period.

AN EVALUATION GUIDE FOR PREDICTING THE EFFECTIVENESS OF A LENGTHENED SCHOOL YEAR PROGRAM

Directions: Place the appropriate symbols after each question:
Y for yes; N for no; X for unknown

Nature of the Question	Yes	No	Un-known
1. Was the program instituted as an experimental one to test the feasibility of one or more minor objectives?			
2. Was the program instituted primarily to take care of a temporary situation or an emergency?			
3. Did the program ever get beyond the experimental stage?			
4. Was the primary objective to save money?			
5. Was the primary objective to save classroom space?			
6. Was the primary objective designated as educational, one not dependent upon classroom space or dollar savings?			
7. Was the program based upon student acceleration?			
8. Was the program in operation long enough to create a reduction in the total enrollment of the school?			
9. Was the program based upon term rotation or cycling?			
10. Were steps taken to insure the equalization of enrollments during each term, quarter, or cycle?			
11. Was the program based upon the time equalization principles referred to as the Multiple Trails Plan?			
12. Was student participation mandatory?			
13. Were steps taken to reduce the number of teachers employed?			
14. Did teachers receive an increase in salary commensurate with legal and/or regular school year salary averages?			
15. Were steps taken to modify the curriculum or grouping practices to facilitate implementation?			
16. Did the new program provide extra learning time for students over a designated number of years?			
17. Did students show any ill affects from their involvement in a program requiring approximately 200 days of schooling per year?			
18. Was student learning as effective in the summer as it was in other seasons of the school year?			

Nature of the Question	Yes	No	Un-known
19. Were steps taken to insure that the parents understood the primary objectives of the new program?			
20. Was the extended school year plan selected suitable for the realization of the primary objective?			
21. Did the program require a greater degree of flexibility than was required for the regular school year program?			
22. Was the staff prepared to implement the new program?			
23. Was new legislation required for the implementation of the program?			
24. Were steps taken to evaluate the program in terms of the objectives?			
25. Was an effective cost analysis study made?			
26. Were comparisons made of the cost of operating the schools under the regular school year with similar ratios of students per teacher, per classroom, per bus seat?			
27. Was the program primarily limited to a designated age group? (Elementary, junior high, senior high, etc.)			
28. Did the program call for time equalization of terms, quarters or some other segment of the school year?			
29. Will students meet minimum legal attendance requirements if they do not work through a full year?			
30. Did the school administrators and school board members have ulterior motives when they announced their intent to institute a lengthened school year program?			
31. Did politics have anything to do with the termination of the extended school year program?			
32. Did economic factors have anything to do with the termination of the program?			
33. Was an inservice teacher training program instituted to facilitate implementation of the new program?			
34. Did the program involve a large number of children who may be designated as disadvantaged? (Socially, economically, academically, emotionally, physically)			
35. Were steps taken to insure that students were guided in the use of their free time, in or out of school?			

On the basis of the review of the questionnaire a different plan would be recommended to meet the local school districts space and dollar problem, for example, the Continuous Learning Year Cycling Plan. The evaluative guide can be used in whole or in part. It can be redesigned by the deletion of some questions or the addition of others. Ultimately, the answers should be considered in the light of the primary objectives.

The third column labeled, unknown, is interesting. In many instances an "X" will be place in this column because of the limited amount of evidence which is available to the researcher. For example, most articles or reports on the Newark and Aliquippa Year Round School programs shed little light on the political conditions which contributed to the demise of these programs.

Dollar Savings, Fact or Fancy

"How can a school system save dollars through a rescheduled school year?" is a question heard over and over again. Many professional educators are vocally opposed to the word economy and insist on elimination of the term from our thinking. Again and again you will hear them state, "You know that you cannot save money."

The Percentage Argument

A number of individuals insist on talking about dollar savings in terms of percentages. If this is the case one would use a base 10.6 percent of the net current expenditures for New York State or a national median of 11.9 percent for debt service. One school superintendent talked about savings in this category as "chicken feed." He said, "Debt service is such a small part of the total budget that it is not worth talking about." Be that as it may, the fact remains that the New York State per pupil cost of debt services adds up to $114.82 per pupil. In our representative district which recently lost is bond issue the percentage was 12.6 percent while the per pupil cost was $131.72.

Figures of this type have little meaning to the average taxpayer, therefore, it is suggested that dollar allowances be substituted in the local school districts for the percentage or per pupil cost figures. For example, one field study shows an increase of $1,123,500 in debt service charges with the building program for the regular school year. The recommended cycling plan cost will be $551,025 for a net saving of $572,475 in the third year of the new bond issue. Since the current (1968-69) allowance of $630,502 for debt service represents 18 percent of the budget, it is easy to predict some taxpayer protests if a building program adds over a million dollars to the annual budget for this item alone.

The State Aid Argument

Many school districts sell a school bond issue to the public on the basis that the STATE will pay the major costs. This argument has been raised about the savings due to the operation of an extended school year program. Assume, for example, that the State is paying 70 to 80 percent of the per pupil costs. A net saving of $800,000 represents a potential saving to the State of $560,000 to $640,000 or $240,000 to $160,000 to the local school district. This is where the local school administrator gets his "chicken feed" figure. The net savings begins to look small, however, he has overlooked the fact that many of his local taxpayers are also paying their share of the State expense.

Reasoning of this type may look ridiculous to the businessman who sees his tax dollars flowing into the Federal and State treasury rather than into the local tax office. The potential dollar saving is there, yet the reduced saving to the local school district due to the State aid factor is a powerful deterrent. Many school administrators and school board members will not take on the responsibility of rescheduling their schools unless they can demonstrate the magnitude of the savings to their constituents.

Steps Taken to Project Dollar Savings in Selected Budgetary Categories

Numerous field studies have shown that it is necessary to go beyond the description of an extended school year plan. People are apt to say, "I understand the design," but they do not know how to procede. Therefore, the remainder of this presentation is devoted to what may be called, "Calculations Used to Show Potential Dollar Savings in Selected Areas of a School Budget."

A Case Study

The Impact of a Rescheduled School Year Upon Central School District "R"

The School District

Central school district "R" consists of a number of rapidly growing suburban communities. Much of the growth has paralleled the expansion of the local I.B.M. plant. Many of the homes are small. The older ones no longer pose a problem to the school district except where the older residents sell to newcomers who are just beginning to raise a family. Due to the unsettled economy there is considerable conjecture about the number of new homes that will be erected in 1970.

The school population increased from 9053 in 1964 to 13,356 in 1969. However, the growth rate has fluctuated from an increase of 1369 pupils in one year to a low of 509 in another. This uneven growth pattern makes it very difficult to plan on new school construction for the future. At present, the school district receives a large reimbursement of school costs through State aid payments. The assessed valuation per pupil is $6,856, whereas the full valuation is $20,387. This places the school district third from the bottom in a county containing 13 school districts. Its 1969-70 aid ratio was .635.

The Enrollment Projections

All cost projections are based upon development of an enrollment projection. Normally, one should avoid making long range projections. In this case, five year projections are made with the understanding that the local school district shall annually review its school building needs in terms of new data. Apparently, enrollment projections were the basis of considerable local conjecture and arguments, a great deal of which stemmed from the difficulty of establishing a figure which would be acceptable for the new kindergarten input.

One school board member used the live census count for his predictions, but this approach is dangerous due to the many variables which can determine its accuracy. He projects a kindergarten enrollment of 909 in 1975 whereas one of the administrators predicts a 1975 kindergarten enrollment of 1329. Two separate enrollment projections were made by the researcher for the case study:

A. The Enrollment Projection with the Declining Kindergarten

An arithmetic average of the last three entering kindergarten classes provided the computer with a ratio of .948864. Each year the kindergarten enrollment dropped approximately 5 percent. As a result the total elementary school enrollment began to show a decline. While the total school systems enrollment increases from 13,941 pupils to 15,284 in 1975, a small decrease in the elementary school enrollment is seen in 1975 although the junior and senior high school enrollments continue to rise.

B. The Enrollment Projection with the Frozen Kindergarten Enrollment Input.

The big variable in predicting future school building needs is the kindergarten enrollment. While an outside consultant firm may make a long range community study to support the input data, past attrition or growth patterns are used to project future school construction needs with one basis modification. For illustrative purposes the 1970 kindergarten forecast has been accepted as the index to be used to calculate future enrollment needs. Since all kindergarten classes entering after 1966 has exceeded the predicted 1268 forecast for 1970, the assumption has been made that the preservation of this figure is closer to reality than one based upon the declining kindergarten figures.

ENROLLMENT PROJECTIONS FOR CENTRAL SCHOOL DISTRICT "R"
BASED ON DECLINING BIRTH RATE CALCULATIONS
1970-1975

Grade	Average Ratio	1970-71 Enrollments	1971-72 Enrollments	1972-73 Enrollments	1973-74 Enrollments	1974-75 Enrollments	1975-76 Enrollments
K	.948864	1268	1203	1141	1083	1028	975
1	.91172	1218	1156	1097	1040	987	937
2	.96369	1236	1174	1114	1057	1002	951
3	1.02089	1264	1262	1199	1137	1079	1023
4	1.01075	1172	1278	1276	1212	1149	1091
5	.99049	1145	1161	1266	1264	1200	1138
6	1.01916	1143	1167	1183	1290	1288	1223
Total K-6		8446	8401	8276	8083	7733	7338
7	1.05391	1089	1205	1230	1247	1360	1357
8	1.00317	985	1092	1209	1234	1251	1364
9	1.13434	1006	1117	1239	1371	1400	1419
Total 7-9		3080	3414	3678	3852	4011	4140
10	1.0082	964	1014	1126	1249	1382	1411
11	.929258	758	896	942	1046	1161	1284
12	.95728	693	726	858	902	1001	1111
Total 10-12		2415	2636	2926	3197	3544	3806
Total K-12		13,941	14,516	15,066	15,490	15,867	15,284

PUPIL ENROLLMENT TRENDS IN THE Central "R" SCHOOL DISTRICT

PROJECTED ENROLLMENT PATTERNS

Grade	Average Ratio	1970-71 Enrollments	1971-72 Enrollments	1972-73 Enrollments	1973-74 Enrollments	1974-75 Enrollments	1975-76 Enrollments
K		1268	1268	1268	1268	1268	1268
1		1218	1156	1156	1156	1156	1156
2		1236	1174	1114	1114	1114	1114
3		1264	1262	1199	1137	1137	1137
4		1172	1278	1276	1212	1149	1149
5		1145	1161	1266	1264	1200	1138
6		1143	1167	1183	1290	1288	1223
Total K-6		8446	8466	8462	8441	8312	8185
7		1089	1205	1230	1247	1360	1357
8		985	1092	1209	1234	1251	1364
9		1006	1117	1239	1371	1400	1419
Total 7-9		3080	3414	3678	3852	4011	4140
10		964	1014	1126	1249	1382	1411
11		758	896	942	1046	1161	1284
12		693	726	858	902	1001	1111
Total 10-12		2415	2636	2926	3197	3544	3806
Total K-12		13,941	14,516	15,066	15,490	15,867	16,131

The total enrollment increases from 13,941 in 1970 to 16,131 in 1975. These figures reflect continued growth in secondary school enrollments with a slight decrease in the elementary school enrollments.

These illustrations point up a problem which has been encountered in many school districts. In order to demonstrate how or where space or dollar savings can be realized, it is necessary to agree on one set of figures. The haggling has to stop. For our case study the enrollment projections used are based upon the ratios developed from changing enrollments of the previous five years. The savings can be adjusted percentage wise to reflect any future enrollment projection which is acceptable to the public.

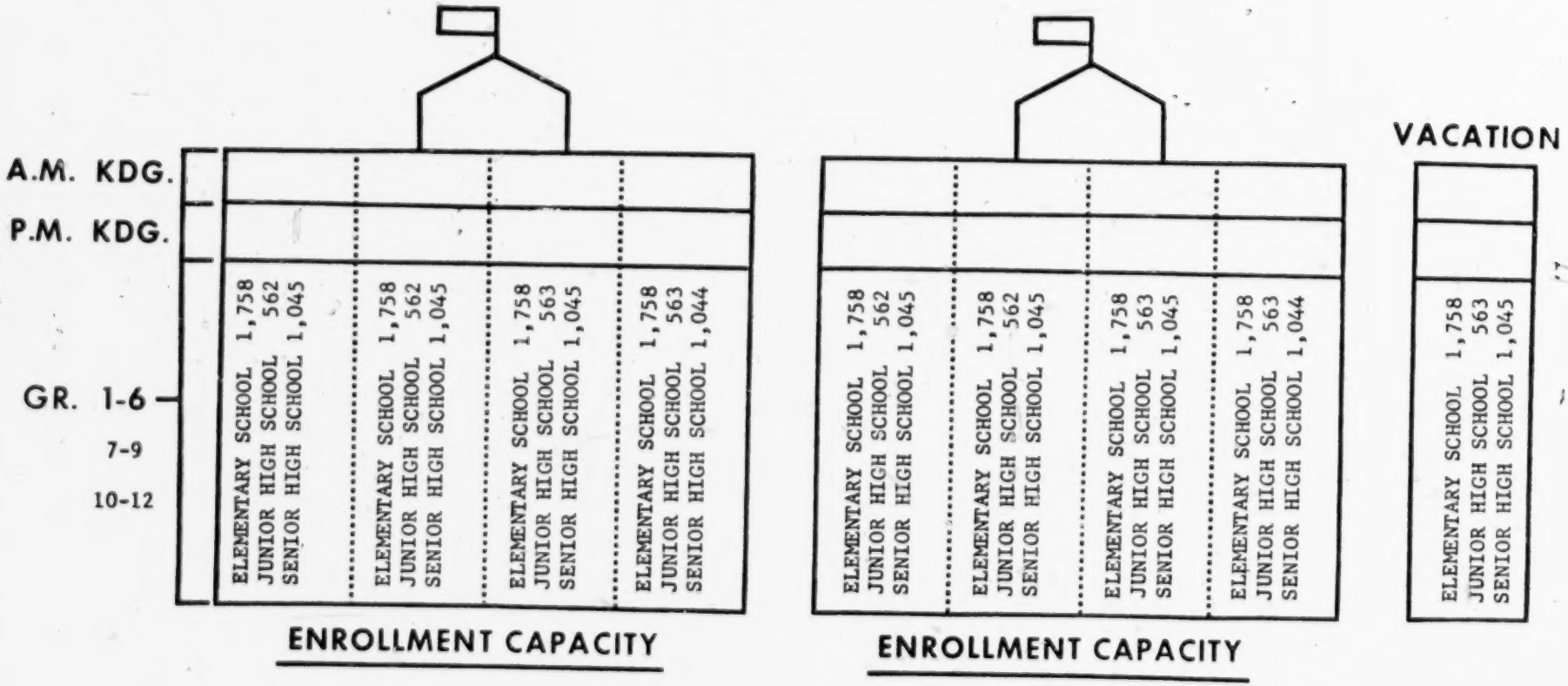
Current School Capacity

Figures should be compiled which show the actual capacity of existing schools in the school district. Sometimes this is not easy to obtain due to faulty reporting and a lack of understanding of what is meant by capacity. For example, a school that was built for 2,000 pupils may be currently housing 3,000 pupils through use of overlapping sessions, the use of makeshift rooms, or through increasing class size in excess of the rated classroom capacity. In the field study we found numerous art rooms or special rooms had been converted to classrooms. As a result schools are housing more students than the schools were supposed to house.

For cost prediction purposes, it is recommended that state approved capacities be used. For elementary school calculations kindergarten classrooms are given a capacity rating of 50 and elementary school classrooms are rated at 27. Thus, a 20 room elementary school with 2 kindergarten rooms and 3 sections of students in grades 1 to 6 will be given a rated capacity of 586.

COMPARATIVE CAPACITY OF WITH AND WITHOUT THE CYCLING PLAN

CENTRAL SCHOOL DISTRICT "R"



TOTAL 13,461 PUPILS

TOTAL 16,827 PUPILS

19

Projecting Classroom Space Needs

For illustrative purposes the projected enrollments of the grade divisions, Elementary K-6, Middle or Junior High School and Senior High School are shown in a Two section chart. The calculations on the left show the projected enrollments, current capacities and the shortages or averages that exist for each school level from 1970 to 1975.

The comparative classroom needs with adoption of an extended school year plan are shown on the right. Here the classroom capacity should reflect the nature of the design and the type of community. For example, the case study shows the capacity of 125 percent of the base stated rated capacity. Thus: 7032 elementary pupil capacity x 125 percent = projected elementary school capacity of 8790. The 25 percent increase is used to show the potential increase inherent in the 8-2 cycling plan. If another design or extended school year plan is recommended such as the 9-3 or 45-15 plan the rated increase would be 33 1/3 percent. Thus: 7032 elementary pupil capacity x 133 1/3 percent = projected elementary school capacity of 9376.

In a refined study one will show the opening of one or more schools prior to 1975. Thus, the classroom capacities for the regular school year would change as new schools begin operation. Each new school opened would automatically increase the extended school year projected capacity by 25 percent or 33 1/3 percent of the new facility. An adjusted chart would probably show the completion of a new school in 1972 or 1973, but end result will be the same for the regular school year whereas the needs for the extended school year would be less.

On the assumption that projected growth problems are correct the school district will have a potential classroom shortage of 2670 pupil stations by 1975. With the adoption of the continuous learning year cycling plan there would be a potential surplus of 696 pupil stations. With the adoption of the 9-3 or 45-15 plan the school would have a potential surplus of 1121 pupil stations.

PROJECTED CLASSROOM SPACE NEEDS FOR CENTRAL SCHOOL DISTRICT "R"
BASED ON ALLOWANCE FOR DECLINING BIRTH RATE
1970-1975

	Projected Classroom Capacity and Requirements WITHOUT Cycling Plan				Projected Classroom Capacity and Requirements WITH Cycling Plan			
	Elementary K-6	Middle School	Senior High	Total	Elementary K-6	Middle School	Senior High	Total
Enrollment--1970	8446	3080	2415	13,941	8446	3080	2415	13,941
Classroom Cap.--1970	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage or overage	- 1414	- 830	+ 1764	- 480	+ 344	- 267	+ 2809	+ 2,886
Enrollment--1971	8401	3414	2636	14,451	8401	3414	2636	14,451
Classroom Cap.--1971	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage or overage	- 1369	- 1164	+ 1543	- 990	+ 389	- 601	+ 2588	+ 2,376
Enrollment--1972	8276	3678	2926	14,880	8276	3678	2926	14,880
Classroom Cap.--1972	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage or overage	- 1244	- 1428	+ 1253	- 1,419	+ 514	- 865	+ 2298	+ 1,947
Enrollment--1973	8083	3852	3197	15,132	8083	3852	3197	15,132
Classroom Cap.--1973	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage or overage	- 1051	- 1602	+ 982	- 1,671	+ 707	- 1039	+ 2027	+ 1,695
Enrollment--1974	7733	4011	3544	15,288	7733	4011	3544	15,288
Classroom Cap.--1974	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage or overage	- 701	- 1761	+ 635	- 1,827	+ 1057	- 1198	+ 1680	+ 1,539
Enrollment--1975	7338	4140	3806	15,284	7338	4140	3806	15,284
Classroom Cap.--1975	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage or overage	- 306	- 1890	+ 373	- 1,823	+ 1452	- 1327	+ 1418	+ 1,543

PROJECTED CLASSROOM SPACE NEEDS FOR CENTRAL SCHOOL DISTRICT "R"
BASED ON FREEZING THE KINDERGARTEN ENROLLMENT
1970-1975

	Projected Classroom Capacity and Requirements WITHOUT Cycling Plan				Projected Classroom Capacity and Requirements WITH Cycling Plan			
	Elementary K-6	Middle School	Senior High	Total	Elementary K-6	Middle School	Senior High	Total
Enrollment--1970	8446	3080	2415	13,941	8446	3080	2415	13,941
Classroom Cap.--1970	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage or overage	- 1414	- 830	+ 1764	- 480	+ 344	- 267	+ 2809	+ 2,886
Enrollment--1971	8466	3414	2636	14,516	8466	3414	2636	14,516
Classroom Cap.--1971	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage or overage	- 1434	- 1164	+ 1543	- 1,055	+ 324	- 601	+ 2588	+ 2,311
Enrollment--1972	8462	3678	2926	15,066	8462	3678	2926	15,066
Classroom Cap.--1972	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage or overage	- 1430	- 1428	+ 1253	- 1,605	+ 328	- 865	+ 2298	+ 1,761
Enrollment--1973	8441	3852	3197	15,490	8441	3852	3197	15,490
Classroom Cap.--1973	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage or overage	- 1409	- 1602	+ 982	- 2,029	+ 349	- 1039	+ 2027	+ 1,337
Enrollment--1974	8312	4011	3544	15,867	8312	4011	3544	15,867
Classroom Cap.--1974	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage or overage	- 1280	- 1761	+ 635	- 2,406	+ 478	- 1198	+ 1680	+ 960
Enrollment--1975	8185	4140	3806	16,131	8185	4140	3806	16,131
Classroom Cap.--1975	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage or overage	- 1153	- 1890	+ 373	- 2,670	+ 605	- 1327	+ 1418	+ 696

Comparative School Construction Costs

In order to accommodate anticipated enrollments between 1970 and 1975 school district "R" should build:

a. one or more elementary schools to accommodate 1200 students

b. one or more secondary schools to accommodate 2100 students.

The construction of these facilities will meet the school building needs projected for September 1975 and would provide a surplus for the secondary school enrollment increase anticipated for 1976. The net surplus would approximate the 8-2 cycling plan surplus which would be available in 1975 without any additional construction.

Since it is anticipated that revised enrollment forecasts will be made in 1971 and 1972, the ultimate new school construction plans may be increased or decreased in terms of changing local conditions. Based upon 1969 school construction costs the projected classroom space needs will cost approximately $11,000,000.

Savings in Debt Service Charges

Those who pooh-pooh savings in debt service charges are ignoring the fact that central school district "R" is currently spending $131.72 per pupil on debt service charges. This represents 12.6 of the annual outlay for education. Without the adoption of an extended school year, the taxpayers can anticipate a marked increase in the allowance for debt service.

The proposed long range school construction project based upon freezing the kindergarten enrollments will cost $10,980,000 in capital funds plus $11,346,310 in new interest charges at 6.2 percent spread over the life of the bond issue. If the school construction program is based upon the declining kindergarten forecast the anticipated outlay for capital will approximate $8,720,000 with the interest charges being reduced to $8,873,130. There are

COMPARATIVE SCHOOL CONSTRUCTION COSTS FOR
REGULAR AND EXTENDED SCHOOL YEAR PLANS

SCHOOL DISTRICT "R" PLAN 8-2 Cycling*

	PROJECTED SCHOOL BUILDING NEEDS FROM 1970 TO 1975							
	Regular School Year Needs				Extended School Year Needs			
	Elementary K-6	Middle School	Senior High	Total	Elementary K-6	Middle School	Senior High	Total
Space requirements (pupils) 1975	7338	4140	3806	15,284	7338	4140	3806	15,284
Current capacity	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage	- 306	- 1890	+ 373	- 1,823	+ 1452	- 1327	+ 1418	+ 1,543
Size of proposed building required	600	1900		NONE NECESSARY				
Dollar per pupil costs	$2500	$3800		NO EXPENDITURE				
Cost per school project	$1,500,000	$7,220,000		NO EXPENDITURE				
Potential Savings	$8,720,000							

*Based on allowance for declining birth rates.

COMPARATIVE SCHOOL CONSTRUCTION COSTS FOR
REGULAR AND EXTENDED SCHOOL YEAR PLANS

SCHOOL DISTRICT "R" PLAN 8-2 Cycling*

	PROJECTED SCHOOL BUILDING NEEDS FROM 1970 TO 1975							
	Regular School Year Needs				Extended School Year Needs			
	Elementary K-6	Middle School	Senior High	Total	Elementary K-6	Middle School	Senior High	Total
Space requirements (pupils) 1975	8185	4140	3806	16,131	8185	4140	3806	16,131
Current capacity	7032	2250	4179	13,461	8790	2813	5224	16,827
Shortage	- 1153	- 1890	+ 373	- 2,670	+ 605	- 1327	+ 1418	+ 696
Size of proposed building required	1200	2100		NONE NECESSARY				
Dollar per pupil costs	$2500	$3800		NO EXPENDITURE				
Cost per school project	$3,000,000	$7,980,000		NO EXPENDITURE				
Potential Savings	$10,980,000							

*Based on freezing the kindergarten enrollment.

BOND SCHEDULE

Amount: $10,980,000
Term: 30 years
Rate: 6.20%

Year	Amount	Annual Payments		Total
		Principal	Interest	Payment
1	$10,980,000	$300,000	$680,760	$980,760
2	10,680,000	300,000	662,160	962,160
3	10,380,000	300,000	643,560	943,560
4	10,080,000	300,000	624,960	924,960
5	9,780,000	300,000	606,360	906,360
6	9,480,000	305,000	587,760	892,760
7	9,175,000	325,000	568,850	893,850
8	8,850,000	325,000	548,700	873,700
9	8,525,000	325,000	528,550	853,550
10	8,200,000	325,000	508,400	833,400
11	7,875,000	325,000	488,250	813,250
12	7,550,000	350,000	468,100	818,100
13	7,200,000	350,000	446,400	796,400
14	6,850,000	350,000	424,700	774,700
15	6,500,000	350,000	403,000	753,000
16	6,150,000	375,000	381,300	756,300
17	5,775,000	375,000	358,050	733,050
18	5,400,000	375,000	334,800	709,800
19	5,025,000	375,000	311,550	686,550
20	4,650,000	400,000	288,300	688,300
21	4,250,000	400,000	263,500	663,500
22	3,850,000	400,000	238,700	638,700
23	3,450,000	400,000	213,900	613,900
24	3,050,000	425,000	189,100	614,100
25	2,625,000	425,000	162,750	587,750
26	2,200,000	425,000	136,400	561,400
27	1,775,000	425,000	110,050	535,050
28	1,350,000	450,000	83,700	533,700
29	900,000	450,000	55,800	505,800
30	450,000	450,000	27,900	477,900
		$10,980,000	$11,346,310	$22,326,310

those who believe the amortization of a school bond issue over 30 years brings the cost down to the point where annual interest costs are negligible. This is not true as the following figures show.

Interest Charges in New School Construction Projects

Year	Interest Payment of 8-2 Plan Based on Fixed Kdg. Enrollment Input	Interest Payment on 8-2 Plan Based on Declining Kdg. Enrollment Input
1	$680,760	$540,640
3	643,560	512,740
5	606,300	483,290
7	568,850	452,290
9	528,550	418,500

When the school budget reflects a payment for interest plus a payment on the principal the taxes must reflect an even greater outlay of funds. Thus,

Debt Service Charges for New School Construction Projects

Year	Total Payment Principal & Interest, Fixed Kdg. Enrollment Input	Total Payment Principal & Interest, Declining Kdg. Enrollment Plan
1	$980,760	$765,640
3	943,360	737,740
5	906,360	733,290
7	893,850	722,290
9	853,550	693,500

While a portion of these projected new debt service charges would be reimbursed by the State, the fact remains that some agency, be it local or state, will

be responsible for a cost that could be eliminated through adoption of recommended rescheduled school year plans.

Dollar Savings in School Plant Operation and Maintenance (Reduced Need for Buildings)

Cost studies of experimented ESY program and extensive summer school programs have failed to show any pronounced increase in school plant and maintenance costs. It is anticipated that there will be some budgetary categories where costs will go up. However, the true test of the impact of a rescheduled school year must be applied to all staff members, including custodians and others responsible for school plant operation and maintenance.

Most critics who express concern about operating costs fail to take into account the fact that fewer school buildings are needed in a large school system. This can reduce the total cost of operation considerably especially where an ESY program makes it possible to dispense with old and obsolete school buildings or reduces the need to operate new school plants. In a growing school district such as central school district "R" the costs must be calculated in terms of regular and extended school year costs for two different sets of buildings.

Current Operating Costs

The 1969 expenditure report for central school district "R" showed an expenditure of $1,308,059 for school plant operation and maintenance. The WADA cost was $116.55. An allowance for retirement and fringe benefit costs for the noncertified staff members responsible for school plant operation and maintenance increases the total costs to $1,516,814 or $135.15 per pupil (WADA).

Projected Operating Costs for New Buildings

Taxpayers who vote their approval of a new school seldom take into account the cost of operation. This can be considerable, therefore, all ESY cost studies

POTENTIAL DOLLAR SAVINGS FOR CENTRAL SCHOOL DISTRICT "R" FROM REDUCED OPERATION AND MAINTENANCE COSTS WITH ADOPTION OF THE ESY CYCLING PLAN

Category	Elementary School Costs and Savings			Secondary School Costs and Savings		
	Per Pupil Costs	Number of Pupils	Potential Savings	Per Pupil Costs	Number of Pupils	Potential Savings
Personal Services	72.03	1200	86,436	90.04	2100	189,084
Equipment	5.67	1200	6,804	7.09	2100	14,889
Supplies and Materials	5.46	1200	6,552	6.83	2100	14,343
Fire Insurance	.30	1200	360	.38	2100	798
Other Expenses	1.81	1200	2,172	2.26	2100	4,746
Fuel and Utilities	21.10	1200	25,320	26.38	2100	55,398
Rental	2.62	1200	3,144	3.28	2100	6,888
Contract, Professional and Technical Services		1200				
Contract, Operation and Maintenance	7.53	1200	9,036	9.41	2100	19,761
Services from other Districts						
Total Operation and Maintenance of Plant			139,884			305,907
Employee Benefits						
Employee Retirement Costs* at 15.837%			13,689			29,945
Social Security Costs at 5.0%			4,322			9,454
Total Employee Benefits			158,011			339,306
Potential Savings			157,835			345,306
Composite Dollar Savings					$503,141	

*Does not include an allowance for employees Retirement Supplement.
**All cost projections may be adjusted upward to reflect changes in the cost of living index.

should include recognition of what it would cost to operate one or two more schools with the regular school year calendar than would be necessary with an extended school year calendar.

A projection of the 1968-69 school plant and maintenance costs in terms of WADA units gives one a rough picture of the new costs which can be anticipated with erection of one 1200 pupil elementary school and one 2100 pupil secondary school. The $116.55 WADA cost, with no adjustments for increases over the next four or five years, would lead the school board to assume that it will cost $139,824 to operate the new elementary school and $305,907 to operate the secondary school. With an allowance for staff retirement and fringe benefit costs, the costs increase to $157,835 and $345,306, respectively.

The adoption of a recommended cycling plan would eliminate the need for the two new schools and could lead to a composite saving of $503,141. This sum should more than offset any projected operating cost increases due to the extension of the school year program in existing schools. This presumes, of course, that the existing school plant operation and maintenance program is built around good maintenance and operational procedures being followed throughout the regular school year calendar months.

Potential Savings in School Bus Operations

The major savings in transportation stems from the reduced need for school buses. The reduction in the number of students attending school at any one time carries with it the implication that fewer buses will be needed. Existing school buses will be driven at least one extra month each year, but this extra cost is more than offset by the reduced number of school buses maintained and operated. Fewer buses means fewer bus drivers and maintenance workers. It may mean less garage space and, of course, a smaller outlay for insurance.

PROJECTING SCHOOL BUS REQUIREMENTS FOR CENTRAL SCHOOL DISTRICT "R"

Current no. of school buses.....89

Capacity of school buses.....60 pupils

No. of school bus seats:
(No. of buses 89 X no. of bus seats 60).....5,340

No. of pupils transported..... 13,356

Ratio of bus seats to pupils:
(No. of pupils transported 13,356 divided by no. of school bus seats 5,340.).....1 to 2.5

Year	Regular School Year Needs			Extended School Year Needs		
	Enrollment	Seats Required	Buses Needed	Enrollment	Seats Required	Buses Needed
1970-71	14,048	5,619	94.65	11,260	4,504	75
1971-72	14,623	5,849	97.48	11,720	4,688	78
1972-73	15,173	6,069	101.15	12,160	4,864	81
1973-74	15,597	6,239	104.	12,499	5,000	83.3
1974-75	15,974	6,390	106.5	12,802	5,121	85.4
1975-76	16,238	6,495	108.25	12,912	5,165	86

Shortage with Regular School Year		Shortage or Overage with Busing	
1st year	-	1st year	14
2nd year	8	2nd year	11
3rd year	12	3rd year	8
4th year	15	4th year	6
5th year	17	5th year	4
6th year	18	6th year	3

Central School District "R's"
Current School Bus Fleet

At present central school district "R" has 117 school buses in operation. Each one is a standard 60 passenger bus. Approximately 28 of them are required to transport parochial school children, so for this study the school bus fleet considered for calculating potential savings is one of 89 buses. Each bus is scheduled to make two or three round trips a day which means that each bus seat transports 2.5 pupils.

Future School Bus Requirements

The number of school buses required for regular or extended school year programs in the future has been calculated in terms of a school bus seat ratio of one bus seat for each 2.501 or 2.5 students. An increase in enrollment will lead to an expansion of the size of the bus fleet. Similarly, the decrease in the enrollment due to adoption of an extended school year plan leads to a reduction in the number of school buses required. The size of this reduction will vary in accordance to the type of extended school year plan adopted and the length of the transition period if the design is based unpon acceleration.

With the adoption of the 8-2 cycling plan the school district will have an excess of school buses through 1975. With adoption of the 9-3 plan or 45-15 plan the school bus surplus will be ever greater than shown. Without the cycling plan it will be necessary to expand the school bus fleet from the current 89 buses to 108 between 1970 and 1975. The comparative school bus needs for the two patterns of school organization are shown in the following chart.

There may be some school board members who will resist the purchasing of additional school buses for the regular school year, but it must be remembered that all cost calculations are based upon establishing an index such as the bus seat ratio. Failure to maintain the ratio will result in a distortion of the costs

or dollar savings. Thus, the decision of the school board to use surplus buses to reduce overcrowding or to shorten the distance walkers must go to become eligible for transportation must be considered as an asset acquired through the rescheduling of the school year.

Savings in Capital Outlay for New School Buses

A school board will often have a fight on its hands if it elects to eliminate one or two school buses. While there are some who claim that the saving of $10,000 is something not worth bothering about, the fact remains that budget cuts in transportation often leads to opposition from many citizens who are normally 100 percent behind the school board. The comparison of school bus requirements for a regular school year program and a recommended extended school year program shows a differential of at least 20 school buses for the public school children. Should the ESY program be extended to include the parochial school, there will be a savings of at least five additional school buses.

A potential reduction of 20 school buses is equal to a savings of at least $200,000 if it is possible to purchase good 60 passenger buses in the early 1970's for $10,000. Conceivably, the school district will not purchase this number at one time, but in terms of the annual budget the savings will be reflected in the decreased need to purchase three additional buses a year for some time to come. Without cycling the school district should buy 3 or 4 buses annually.

Potential Savings in Instructional Services--Teacher Salaries

There are several other areas where dollar savings may be realized through the rescheduling of the school year, but many of them are of little consequence in comparison to what may be saved in instructional services--teachers salaries. What is saved in this area will depend upon the nature of the extended school

year and the nature of teacher contracts. To realize a savings in teacher salaries it is necessary to reduce student enrollments and employ teachers for at least eleven months. Just how dollar savings can be realized is not easy to explain because of the wide variety of employment plans that may be adopted. For example, little if any, savings can be realized with a cycling plan which allows teachers and students to take the same vacations. In this situation the savings in other categories is still a profit to the taxpayer.

Field studies have demonstrated that the greatest dollar savings are realized when teachers are employed for eleven months and the students attend school for the equivalent of a ten month school year, one which provides them with 180 instructional days. A school district should be able to save between 10 to 13 percent of the extended school year budget allotment for teachers salaries after teachers have been given a ten percent increase for an eleventh month of service. If a cycling plan is adopted which provides approximately 200 instructional days, it will be necessary to employ teachers under a twelve month contract. This will provide the pupils with extra instructional time, but it will require the expenditure of virtually all of the dollar savings realized in salaries due to the reduction in the number of teachers.

Teacher Pupil Ratios

Current pupil teacher ratios are used to project teacher requirements from 1970 to 1975. The calculations are based upon a study of school district "R's" reports to the State. A more refined set of ratios may be established through a study of individual school staff needs and the way teachers are used. For example, insufficient data about the handicapped pupils made it difficult to adjust the teacher ratios in terms of the small enrollments normally found in classes for the handicapped. Adjustments were made for the half day kindergarten

CLASSROOM TEACHER REQUIREMENTS FOR CENTRAL SCHOOL DISTRICT "R"

WITH THE REGULAR SCHOOL YEAR CALENDAR 1970-75

Category	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Projected no. of kdg. children	1268	1268	1268	1268	1268	1268
Projected no. of kdg. teachers	25	25	25	25	25	25
Projected no. of pupils in grades 1-6	7178	7198	7194	7173	7044	6917
Projected no. of teachers in grades 1-6 (ratio 1 to 22.69)	316.4	317.2	317.0	316.1	310.4	304.8
Projected no. of supportive staff (ratio 1 to 117.87)	60.9	61.1	61.0	60.9	59.8	58.7
Projected no. of handicapped children	___	___	___	___	___	___
Projected no. of teachers for handicapped.	___	___	___	___	___	___
Total No. of Teachers Required for Grades K-6	402.3	403.3	403.0	402.0	395.2	388.5

CLASSROOM TEACHER REQUIREMENTS FOR CENTRAL SCHOOL DISTRICT "B"

WITH THE REGULAR SCHOOL YEAR CALENDAR 1970-71

Secondary School Needs

Category	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Projected no. of secondary school pupils	5501	6050	6604	7049	7355	7846
No. of teachers required for grades 7-12 (15.73)	349.7	384.6	419.6	448.1	480.3	498.8
No. of supportive staff members required for gr. 7-12 (Ratio 1 to 80.33)	68.5	75.3	82.2	87.8	94.0	97.7
No. of handicapped children	—	—	—	—	—	—
No. of teachers required for handicapped children	—	—	—	—	—	—
Total no. of teachers required for grades 7 to 12.	418.5	459.9	502.0	535.9	574.3	596.5

and a rough calculation was made to establish a pupil teacher ratio for special or supportive teachers. The result was the following:

Kindergarten teacher-pupil ratio	1 to 50
Elementary classroom teacher-pupil ratio	1 to 22.69
Supportive staff, elementary school ratio	1 to 117.87
Junior-senior high school classroom teacher-pupil ratio	1 to 15.73
Supportive staff, secondary school ratio	1 to 80.33

Modification of these ratios upwards or downwards will affect the projected dollar savings. However, it must be understood that all cost studies must show comparative teacher needs for both regular and extended school year programs based upon use of a common yardstick. If class sizes are increased with the regular school year program, fewer teachers will be required. Similarly, a decrease in class size with the extended school year program will increase the number of teachers required and thereby use up a portion of the projected dollar savings. If future cost studies are made, recognition must be given to the class size issue.

Projecting Teacher Needs for the Early 1970's*

The projection of elementary teacher needs shows a gradual decline in the number of teachers required for both the RSY and ESY programs due to a potential reduction in the number of students entering school. For example, the elementary teacher requirements with the RSY program decrease from 402 teachers in 1970 to 388.5 in 1975. Similarly, the ESY staff reduces from 322 to 311. In contrast the increasing secondary school enrollments show a need for additional teachers. With the RSY program the staff will increase from 418.5 to 596.5; with the ESY program the staff will increase from 335 to 477.

*Based on enrollment projections for the fixed kindergarten enrollment input 1970-1975.

CLASSROOM TEACHER REQUIREMENTS FOR CENTRAL SCHOOL DISTRICT "R"

WITH THE EXTENDED SCHOOL YEAR CALENDAR 1970-71

Elementary School Needs

Category	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Projected no. of kdg. children in the ESY.	1268	1268	1268	1268	1268	1268
Projected no. of kdg. children in the ESY	1014	1014	1014	1014	1014	1014
Projected no. of kdg. teachers required for ESY	20	20	20	20	20	20
Projected no. of children in gr. 1-6 in the ESY.	7178	7198	7194	7173	7044	6917
Projected no. of children in gr. 1-6 in the ESY	5742	5758	5755	5738	5635	5534
Projected no. of classroom teachers required with ESY	253	254	254	253	248	244
Projected no. of supportive teachers required with ESY	49	49	49	49	48	47
No. of handicapped children	—	—	—		—	—
No. of teachers required for handicapped children						
Total no. of elementary teachers required for K to 6	322	323	323	322	316	311

CLASSROOM TEACHER REQUIREMENTS FOR CENTRAL SCHOOL DISTRICT "B"

WITH THE EXTENDED SCHOOL YEAR CALENDAR 1970-75 to 1975

Secondary School Needs

Category	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Projected no. of secondary school pupils- with ESY	5501	6050	6604	7049	7555	7846
Projected no. of secondary school pupils with ESY	4400	4840	5283	5689	6044	6277
Projected no. of classroom teachers with ESY	280	308	336	358	384	399
Projected no. of supportive staff with ESY	55	60	66	70	75	78
No. of handicapped children	--	--	--	--	--	--
No. of teachers for handicapped	--	--	--	--	--	--
Total No. of Secondary School Teachers	335	368	402	428	459	477

These projections are based upon the adoption of the 8-2 cycling plan which calls for a 20 percent reduction in the total school enrollment. Adoption of the 9-3 or 45-15 plan would reduce enrollments by 25 percent, thereby setting the stage for a greater staff reduction than has been shown in the accompanying tables.

Potential Dollar Savings in Teacher Salaries
With Teachers Employed on an Eleven Month Basis

The assumption has been made that teachers will be employed under a new eleven month contract. The ten month salary has been increased by ten percent with allowances for retirement and other fringe benefits built into the new contract. In the interest of brevity and simplicity, the figures reported below were not refined to reflect several fringe benefit savings. Actually, the entire issue of the nature of the contract and the employment practices recommended will have to be covered in another presentation. May it suffice to say that approximately one million dollars can be saved in 1970 in professional teaching staff salaries. This savings will increase to approximately 1,800,000 in 1975.

Potential Dollar Savings in Teacher Salaries

	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Elementary Savings	943,960	570,332	599,115	629,922	656,569	681,536
Secondary Savings	633,778	727,812	827,510	947,078	1,054,252	1,157,697
Composite Savings	1,177,738	1,298,144	1,426,625	1,577,000	1,710,821	1,839,233

The potential savings in teacher salaries will appeal to many people whose major interest is the preservation of the minimum 180 day school calendar. It is recommended that something more than the immediate dollar savings be considered. Education for life in the next few decades should provide additional learning time,

PROJECTED TEACHER SALARY COSTS FOR CENTRAL SCHOOL DISTRICT "R"
WITH THE REGULAR SCHOOL YEAR CALENDAR

ELEMENTARY SCHOOL COSTS

Category	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Number of teachers required	402	403	403	402	395	389
Average salary for 10 months	$ 9,111	$ 9,567	$ 10,045	$ 10,547	$ 11,074	$ 11,628
Allowance for retirement at 20%	1,822	1,913	2,009	2,109	2,215	2,326
Social Security costs at 5%	455	478	502	527	554	581
Total 10 month salary cost	11,388	11,958	12,556	13,183	13,843	14,535
Projected cost of salaries	$ 4,577,976	$ 4,819,074	$ 5,060,068	$ 5,299,566	$ 5,467,985	$ 5,654,115

SECONDARY SCHOOL COSTS

Number of teachers required	419	460	502	536	574	597
Average salary for 10 months	$ 9,782	$ 10,271	$ 10,785	$ 11,324	$ 11,890	$ 12,485
Allowance for retirement at 20%	1,956	2,054	2,157	2,265	2,378	2,497
Social Security at 5%	489	514	539	566	595	624
Total 10 month salary cost	12,227	12,839	13,481	14,155	14,863	15,606
Projected cost of salaries	$ 5,123,113	$ 5,905,940	$ 6,767,462	$ 7,587,080	$ 8,531,362	$ 9,316,782

PROJECTED TEACHER SALARY COSTS FOR CENTRAL SCHOOL DISTRICT "R"
WITH THE EXTENDED SCHOOL YEAR CALENDAR

ELEMENTARY SCHOOL COSTS

Category	1970-71	1971-72	1972-73	1973-74	1974-75	1975-76
Number of teachers required	322	323	323	322	316	311
Average salary for 10 months	$ 9,111	$ 9,567	$ 10,045	$ 10,547	$ 11,074	$ 11,628
Allowance for retirement at 20%	1,822	1,913	2,009	2,109	2,214	2,326
Social Security costs at 5%	456	478	502	527	554	581
Total 10 month salary cost	11,389	11,958	12,556	13,183	13,842	14,535
Salary for extra month	911	957	1,004	1,055	1,107	1,163
Retirement allowance for 1 month	228	239	251	264	277	291
Salary cost for extra month	1,139	1,196	1,255	1,319	1,384	1,454
Total 11 month salary cost	12,528	13,154	13,811	14,502	15,226	15,989
Total salary cost of elementary teachers with the ESY program, an 11 month contract	$ 4,034,016	$ 4,248,742	$ 4,460,953	$ 4,669,644	$ 4,811,416	$ 4,972,579

SECONDARY SCHOOL COSTS

Number of teachers required	335	368	402	428	459	477
Average salary for 10 months	$ 9,782	$ 10,271	$ 10,785	$ 11,324	$ 11,890	$ 12,485
Allowance for retirement at 20%	1,956	2,054	2,157	2,265	2,378	2,497
Social Security costs at 5%	489	514	539	566	595	624
Total 10 month salary cost	12,227	12,839	13,481	14,155	14,863	15,606
Salary for extra month	978	1,027	1,079	1,132	1,189	1,249
Retirement allowance for 1 month	196	205	216	227	238	250
Salary cost for extra month	1,174	1,233	1,295	1,359	1,427	1,499
Total 11 month salary cost	13,401	14,071	14,776	15,514	16,290	17,105
Total salary cost of secondary teachers with the ESY program, an 11 month contract	$ 4,489,335	$ 5,178,128	$ 5,939,952	$ 6,639,992	$ 7,477,110	$ 8,159,085

therefore, it is recommended that serious consideration be given to the adoption of the Continuous Learning Year Cycling Plan or some other extended school year plan which provides all students with at least 195 to 200 instructional days per year. This could reduce the savings in teacher salaries because a 12 month contract will cost more money.

On the other hand, adoption of a 200 day school year without an emphasis upon acceleration could lead to a modified day during the hottest months of the school year for all students. At the secondary school level the lengthened educational time line could set the stage for adoption of the time equalization program used with the Multiple Trails Plan. This will increase the amount of space that is released and will change the nature of the teacher and student day. They will, with true flexible scheduling, have fewer instructional or learning periods per week and will have an increase in free time to devote to special interests or other responsibilities.

Summary

There are many approaches to the Rescheduling of the School Year. Each community should select the one which is most appropriate for the needs of the community. In some school districts special educational needs may warrant a different approach than another. Here, space and dollars may be less important. In other school districts the primary objective may center around the release of classroom space or dollars. The case study, which is real, shows that economies may be realized in various budgetary categories.

In most school systems the key to the success of the rescheduled school year program will depend upon the steps which are taken to implement the new program. If every school district elects to ignore the accomplishments of others, the revision of a curriculum can be time consuming and costly. It need not be if steps are taken to build upon what other good school systems and educational

centers or producers of educational materials and equipment have developed. The potential dollar savings plus the modified school year will have an impact upon the local community, the State, and the Nation which will be positive.